Abstract

[0052] The invention addresses hardware and software products capable to make contemporaneous accurate predictions regarding how a person's biological system will respond to a series of stimuli. The predictions can then be communicated in real time, enabling confirmation of good control status, need for corrective action, planning future actions, or even outside intervention in case of emergency. Also addressed by the invention is a family of diagnostic hardware based on intelligent optoelectronic sensors that incorporate one or more Wedge-and-Strip Position-Sensitive Photo-Detectors optimized for probabilistic real time evaluation of spectroscopy data from living subjects.